UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,144	12/29/2000	Steve Lewontin	730.39161X00	6775

20457	7590	01/27/2005

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EXAMINER
NGUYEN BA, PAUL H

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/750,144	LEWONTIN, STEVE
	Examiner	Art Unit	
	Paul Nguyen-Ba	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2004*.

2a)☐ This action is **FINAL**.　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
　　closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　 application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1.   This action is responsive to Applicant's Supplemental Response, filed on 8/30/2004.

2.   Claims 1-19 are currently pending. Claims 1 and 10 are independent claims.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-3, 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Simon

Hunt et al. ("Simon Hunt"), U.S. Patent Application Publication No. 2004/0049737.

Independent Claims 1, 10 and Claims 2, 3, 11-13

Simon Hunt discloses a method of representing a documents written in a markup

language and stored in a mobile terminal adapted to receive said document and render said

document on said display (see Abstract), the method comprising:

- *providing a virtual node tree describing the structure of the data types, with each one of the nodes in the virtual node tree respectively corresponding to one element of a specific data type in the document* (see Fig. 2 and [0085]-[0090], [0140], [0146]-[0151] *et seq.* → DOM tree);

- *for each one of the nodes in the virtual node tree, providing a data array including information identifying the relationship of the node to other nodes in the virtual node tree and a reference indicating the location of data corresponding to the node* (see [0016], [0152]); and

- *obtaining, by a set of software components in the mobile terminal, the data corresponding to the nodes using the reference included in the data array* (see [0016], [0149] → Based on the nodes of the object tree, the QDOM generates an array of primitive data types for efficiently developing an optimized standard structure)

- *wherein the data in the document is stored in a document block in memory* (see [0146] and [0289]).

- *wherein the document is written in XML or a variation of XML* ([0014], [0050])

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 4, 6, 8, 9, 14, 16, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Simon Hunt et al. ("Simon Hunt"), U.S. Patent Application Publication No. 2004/0049737,

U.S. Patent No. 6,567,815, in view of Call, U.S. Patent Application Publication No.

2002/0143521.

Claims 4 and 14

Simon Hunt discloses the method with respect to independent claims 1 and 10 above, but

does not specifically disclose data arrays including a flags field.

However, Call discloses the use of flags to uniquely identify a selected rule in a manner

tailored to the needs of the portion of the XML document (see Call [0362]) for the purpose of

signaling a particular condition or status.

It would have been obvious at the time the invention was made to a person having

ordinary skill in the art to modify the teaching of Simon Hunt with the teachings of Call to

include the use of flag fields to uniquely identify a selected rule in a manner tailored to the needs

of the portion of the XML document (see Call [0362]) for the purpose of signaling a particular

condition or status.

Claims 6 and 16

Simon Hunt does not specifically disclose the method wherein a flag in the flags field and

identifies the type of the node data. However, Call discloses that the header information for each

node identifies the data type of the node (see Call [0368]; see also Figure 6).

It would have been obvious at the time the invention was made to a person having

ordinary skill in the art to modify the teaching of Simon Hunt with the teachings of Call to

include the use of flag fields to uniquely identify the data type of the node for the purpose of

signaling a particular condition or status of the data.

Claims 8, 9, 18, 19

Simon Hunt discloses the method and mobile phone with respect to independent claims 1 and 10

as discussed above, but does not specifically teach whether the data arrays have a fixed or

variable length. However, it was commonly known to those of ordinary skill in the art and

would have been obvious at the time the invention was made to a person having ordinary skill in

the art that data arrays can be either fixed or variable for the purpose of holding a preset or

expanding number of objects. Furthermore, Call discloses fixed and variable length data as an

addressable array to provide efficient data manipulation functions typically performed by

hierarchical object oriented data systems, including systems conforming to the Document Object

Model widely used for storing and manipulating XML and HTML character data (see Call

[0016] and [0017]) for the purpose of compact data representation to preserve storage space (see

Call [0013]). It would have been obvious at the time the invention was made to a person having

ordinary skill in the art to modify the teaching of Rubin with the teachings of Call to include the

representation of a document structure written in a markup language, wherein the data arrays

have a fixed or variable length for the purpose of compact data representation to preserve storage

space.

7.   Claims 5, 7, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon

Hunt et al. ("Simon Hunt").

Claims 5, 7, 15, 17

Simon Hunt further discloses an array indicating whether a node is a sibling or child (see

[0149], [280]), but does not specifically teach indicating whether or not the node is the last

sibling in a list of siblings and does not specifically teach a child index and a sibling index in the

data array.

However, it was commonly known to those of ordinary skill in the art and would have

been obvious at the time the invention was made to a person having ordinary skill in the art that

the position of a node can be calculated by its arrangement in the data array respective to its

siblings for the purpose of indicating whether or not the node is the last sibling in a list of

siblings. It was also commonly known to those of ordinary skill in the art and would have been

obvious at the time the invention was made to a person having ordinary skill in the art that a

child and sibling index can be created using data arrays to further clarify the hierarchical

standing of particular nodes.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

     US 20020091835 A1   US-PGPUB   20020711   Lentini, Russell P. et al.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Paul Nguyen-Ba whose telephone number is (571) 272-4094.

The examiner can normally be reached on 10 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER